



Guidelines for Installing R407C (GAW) Units

- R407C has very similar pressures and temperature glide when compared to R22
- The existing R22 coil should be 12 yrs. old or less. These units perform best when paired with 12-13 seer coils. If you cannot determine the seer by model or serial number, the age of the coil is a good indication of its compatibility. Any coil produced before 2008 should be avoided.
- These units are **Not Dry!** They come charged with 1lb of R407C.
- R407C is a mix of refrigerants like R410A so units must be charged as a liquid and the refrigerant bottle must be flipped over. Using a sight glass for charging or troubleshooting is not effective as you can still see bubbles when charged correctly.
- Perform an acid test on the old system before removal. If acid is present, perform the proper burnout cleanup procedure as per unit installation manual. If acid is not present, the majority of the existing systems mineral oil must still be removed. Line sets if reused must be flushed with RX11 or equivalent. Existing coils should be blown out with nitrogen to remove as much oil as possible. Old filter driers and solenoid valves and TXV's must be removed. Cliplight Super Change system retrofit is recommended to ensure proper oil return and system performance.
- Unit connections should be brazed with a SIL-FOS alloy brazing rod 5% or better. **Use of soft solder is not approved.** Dry nitrogen should always be supplied through the tubing while it is being brazed. Only a small flow is necessary to displace air and prevent oxidation.
- To verify that the system has no leaks, simply close the valve to the vacuum pump suction to isolate the pump and hold the system under vacuum. Watch the micron gauge for a few minutes. If the micron gauge indicates a steady and continuous rise, it is an indication of a leak. If the gauge shows a rise, then levels off after a few minutes and remains fairly constant, it's an indication that the system is leak free but still contains moisture and may require further evacuation if the reading is above 500 microns.
- When charging the unit start with a base charge on top of the existing 1lb factory charge. Refer to the chart below for the base charge, the first number indicates pound the second number is ounces. Calculate CFM to ensure 350-400 per ton. Then dial in your charge according to the liquid pressure on the units charging chart. **Ignore Subcooling**, if the measured liquid line pressure is below the value on the chart add refrigerant, if it is higher remove refrigerant. Measure the temperature difference across the indoor coil (Delta T) to achieve 15-20 degree split.

Outdoor Unit	GAW14L18C23S	GAW14L24C23S	GAW14L30C23S	GAW14L36C23S	GAW14L42C23S	GAW14L48C23S	GAW14L60C23S
Required TXV	2A1	2A1	2A1	2A1	2C1	2C1	2C1
Indoor Unit	Starting Charge, lb-oz						
FC1CXT1	1 - 12	-	-	-	-	-	-
FC3DXT1	-	2 - 2	2 - 8	2 - 8	2 - 0	-	-
FC5DXT1	-	-	-	-	-	3 - 5	3 - 12